# Montana Laboratory Sentinel

MONTANA Department of Public Health & Human Service

**Updates from the MT Laboratory Services Bureau**
**800-821-7284** **www.lab.hhs.mt.gov**

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## MMWR Addresses Syphilis Reverse Sequence Testing

*Treponema pallidum*, the bacterium that causes syphilis, cannot be cultured. As a result, serologic testing is the method most often used to diagnose syphilis in patients with suspected disease. Because syphilis can be asymptomatic, serologic screening is recommended for 1) persons at high risk, to detect latent infections; 2) pregnant women, to prevent congenital syphilis; and 3) blood donors, to prevent transmission through transfusion.

There are currently two syphilis screening algorithms – the traditional non-treponemal (VDRL, RPR) screen followed by a treponemal assay (FTA-ABS or TP-PA) or the treponemal (EIA, CIA, MBIA) screen followed by a non-treponemal test. This second algorithm is referred to as "reverse sequence". The reverse sequence algorithm has been incorporated in some laboratories because these treponemal screening assays are objective, automated and can provide high throughput as opposed to the traditional RPR or VDRL. However, because these tests can detect previously treated cases of syphilis as well as new cases, additional tests may be needed; and the interpretation of the entire reverse sequence algorithm can be problematic.

This MMWR provides data from clinical sites that have performed treponemal screening assays on large numbers of patients. For the entire article, click here.

## Reverse Sequence Syphilis Screening Webinar

Because of the information provided in the MMWR referenced above, CDC convened a webinar to address questions around reverse sequence testing. A link to the archived version of the Webinar is available by clicking here. This webinar is for clinicians who provide screening, diagnosis, and clinical care for persons at risk for or infected with syphilis.

## MTPHL to Switch Syphilis Confirmatory Assays

The Montana Public Health Laboratory continues to use the traditional non-treponemal algorithm for screening for syphilis (VDRL method), but is now switching treponemal antibody methodologies for confirmatory testing of syphilis serology specimens. The *Treponemal pallidum* by Particle Agglutination (TP-PA) assay is considered more sensitive than the previously offered FTA-ABS. In addition, the TP-PA does not require a special microscope and trained fluorescent microscopist, and is less subjective than the FTA-ABS. The results are qualitative only, and will be reported as Reactive, Non-Reactive or Inconclusive. Effective immediately, if you should order an FTA-ABS test, the TP-PA test will be substituted. The fee and CPT code will remain the same.

For questions about submission of specimens for testing, see the MTPHL Laboratory Services Manual online.

## Influencing Test Utilization: The Clinical Laboratory's Expanding Role

Mayo Clinic is introducing a series of Hot Topics that will focus on improving test utilization, and the role of the clinical laboratory. The first of the series is *Serologic Testing for Syphilis*, presented by Dr. Matthew Binnicker, Director of the Infectious Diseases Serology Laboratory at Mayo Clinic.

Serologic techniques play a major role in the diagnosis and follow-up of Syphilis, a disease caused by infection with the spirochete *Treponema pallidum*. This presentation explains the serological testing algorithm and interpretation for syphilis. To view or read the presentation, visit the Hot Topic.

## APHL Responds With Guidance and Resources to Help Deal With the 2011 Japan Nuclear Crisis

On Friday March 11, 2011, a 9.0 earthquake struck Japan and caused a tsunami that devastated the northwest region. As a result of these events, the reactors at the Fukushima Daiichi nuclear power plant were damaged. Multiple explosions and spewing radiation have caused major concerns of radiation exposure. Over the past few weeks, APHL has been working to gather capability data from member laboratories and federal partners in FDA, EPA and CDC, and maintain lines of communication. Information can be found at this link.

## MT DPHHS CDEpi Update

The Communicable Disease Epidemiology Program Weekly Update for MMWR reporting weeks 13 and 14 can be found by clicking here.

This issue contains information about:

- Influenza season update
- Call for data about influenza in pregnant and postpartum women: 2010-2011
- Recently confirmed measles in the U.S.
- Tuberculosis Surveillance Snapshot

For week 13 case counts by county visit this link.
For week 14 case counts by county visit this link.

**Save the Date!!!**

Bioterrorism Preparedness for Sentinel Laboratory Personnel
Where: Carroll College, Helena, MT
When: **June 24, 2011**
Be on the lookout for more information to follow!